Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERGE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

| 0206 |  |
|------|--|
| 604  |  |
|      |  |

| UTILITY            | Attorney Docket No. |                |  |  |
|--------------------|---------------------|----------------|--|--|
| PATENT APPLICATION | First In            | First Inventor |  |  |
| TRANSMITTAL        | Title               | High Strength  |  |  |
|                    |                     |                |  |  |

| Attomey Docket No. First Inventor |                 | 1789-12001                     | 70          |
|-----------------------------------|-----------------|--------------------------------|-------------|
|                                   |                 | Andrew R. Barron               | 2.4<br>8.60 |
| Title                             | High Strength P | olycrystalline Ceramic Spheres | 72          |
| Expres                            | s Mail Label No | EV 303424801 US                | 200         |

| TRANSMITTAL Ti   |  | Title         | le High Strength Polycrystalline Ceramic Spheres  |  |  |  |  |  |
|--|--|---------------|---|--|--|--|--|--|
| Only for new nonprovisional application  | ns under 37 CFR 1.53(b))   | Expres        | ess Mail Label No. EV 303424801 US  |  |  |  |  |  |
| APPLICATION I See MPEP chapter 600 concerning uti  | ELEMENTS   | itents.       | Mail Stop Patent Application ADDRESS TO; Commissioner for Patents P. O. Box 1450 Arlington VA 22313-1450  |  |  |  |  |  |
| Fee Transmittal Form (e.g., (Submit an original and a duplicate for f.)  |  |               | 7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)  |  |  |  |  |  |
| 2. Applicant claims small enti<br>See 37 CFR 1.27.   |  |               | <ul> <li>8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)</li> <li>a. Computer Readable Form (CRF)</li> </ul> |  |  |  |  |  |
| 3. Specification [Total Pages 21]  (preferred arrangement set forth below)  - Descriptive title of the invention  - Cross Reference to Related Applications  - Statement Regarding Fed sponsored R & D |  |               | <ul> <li>b. Specification Sequence Listing on:</li> <li>i.</li></ul>  |  |  |  |  |  |
| - Reference to sequence list<br>or a computer program list   | sting, a table,  |               | ACCOMPANYING APPLICATION PARTS  |  |  |  |  |  |
| <ul> <li>Background of the Invent</li> <li>Brief Summary of the Inv</li> <li>Brief Description of the D</li> </ul>   | ition<br>vention   |               | 9. Assignment Papers (cover sheet & document(s))  10. 37 CFR 3.73(b) Statement Power of (when there is an assignee) Attorney                    |  |  |  |  |  |
| <ul><li>Detailed Description</li><li>Claim(s)</li></ul>  |  |               | 11. English Translation Document (if applicable)  |  |  |  |  |  |
| - Abstract of the Disclosure  4.   |  |               | 12. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 Citations   |  |  |  |  |  |
| 5. Oath and Declaration  | [Total Pages ]   | 1             | 13. Preliminary Amendment   |  |  |  |  |  |
| <ul><li>a.  Newly executed (origi</li><li>b.  Copy from a prior app</li></ul>  | ginal or copy) plication (37 CFR 1.63(d)   |               | 14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized)  |  |  |  |  |  |
| i. DELETION OF Signed statement at   | attached deleting inventor(s)  | ,             | 15. Certified Copy of Priority Document(s)  (if foreign priority is claimed)  |  |  |  |  |  |
| named in the prior a 1.63(d)(2) and 1.33  6. Application Data Sheet. See   |  |               | 16. Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.                             |  |  |  |  |  |
| 10 If a CONTINUING APPLICA   | TION check appropris   | ata hox.      | 17. Other:  a, and supply the requisite information below and in the first  |  |  |  |  |  |
| stntence of the specification following  | ng the title, or in an Appl  | olication D   | Data Sheet under 37 CFR 1.76:   |  |  |  |  |  |
| Continuation Divisi  | Examiner   | uation-in-Par | Group/Art Unit:   |  |  |  |  |  |
| 5b, is considered a part of the disclosure   | For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. |               |   |  |  |  |  |  |
| 19. CORRESPONDENCE ADDRESS   |  |               |   |  |  |  |  |  |
| Customer Number of Bar Code Labe   | el 2   | 23505         | or Correspondence address below   |  |  |  |  |  |
| Name   |  |               |   |  |  |  |  |  |
| Address  |  | Т             |   |  |  |  |  |  |
| Country  | Tale   | State         |   |  |  |  |  |  |
| Country  |  | ephone        | Fax   |  |  |  |  |  |
| Name (Print/Type) Marcella D   | Watkins  |               | Registration No. (Attorney/Agent) 36.962  |  |  |  |  |  |
| Signature /////  | 111/1/1/14   | He            | Date February , 2004  |  |  |  |  |  |

The collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA. 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/017 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

| FEE TRANSMITTAL   |                          | Complete if Known         |                      |                 |              |  |                                   |          |  |
|---|--------------------------|---------------------------|----------------------|-----------------|--------------|--|-----------------------------------|----------|--|
|   |                          | Application               | Application Number   |                 |              | *  |                                   |          |  |
| For FY 200  | 4                        | Filing Date               | Filing Date          |                 |              | *  |                                   |          |  |
| Effective 10/01/2003. Patent fees are subje   | ect to annual revision.  | First Name                | First Named Inventor |                 |              | Andrew R. Barron                         |                                   |          |  |
|   |                          | Examiner N                | Name                 |                 | *            | •  |                                   |          |  |
| Applicant claims small entity status. S   | ee 37 CFR 1.27           | Art Unit                  |                      |                 | *            |  |                                   |          |  |
| TOTAL AMOUNT OF PAYMENT   | \$ 428.00                | Attorney D                | ocket 1              | No.             | 1789-12      | 2001                                     |                                   |          |  |
| METHOD OF PAYMENT (Check a  | ll that apply)           |                           | FE                   | LE CAI          | LCULA        | TION (conti                              | inued)                            |          |  |
| ☐ Check ☐ Credit Card ☐ Money [   | Other None               | 3. ADDITI                 |                      |                 | S            |  |                                   |          |  |
| Order   | J Onici Li 110.10        | Large Entity<br>Fee Fee   | Small<br>Fee         | l Entity<br>Fee | Fee Descri   | -lusion                                  |                                   |          |  |
| □ Deposit Account:     □  | J                        | Code (\$)                 | Code                 |                 | ree Desci    | iption                                   |                                   | Fee Paid |  |
| Deposit Account Number: 03-2769   | J                        | 1051 130                  | 2051                 |                 | Surcharge    | - late filing fee                        | or oath                           | \$       |  |
| Deposit Account Name: Conley Rose, P.C  | J.                       | 1052 50                   | 2052                 |                 | Surcharge    | - late provision                         |                                   | <u>.</u> |  |
|   | J                        | I                         | - 14                 |                 | fee or cove  | er sheet                                 |                                   | S        |  |
| The Director is authorized to: (check all that ap   | ply)                     | 1053 130                  | 1053                 |                 |              | lish specification                       |                                   | \$       |  |
| ☐ Charge fee(s) indicated below   | 1                        | 1812 2,520                | 1812                 | 2,520           |              | a request for ex                         | ; parte                           |          |  |
| <ul><li>☐ Charge any additional fee(s) during the pendency</li><li>☐ Charge fee(s) indicated below, except for the fill</li></ul> |                          | 18042 920*                | 1804                 | 920*            |              | ng publication of                        | f SIR prior                       | S        |  |
| to the above-identified deposit account  Credit any overpayments  |                          | 1805 1,840*               | 1805                 | 1,840*          |              | g publication of                         | f SIR after                       | \$       |  |
| FEE CALCULATION   |                          | 1251 110                  | 2251                 | 55              | Examiner :   |  | - C-+ -anth                       | \$       |  |
|   |                          | 1251 110<br>1252 420      | 2251<br>2252         |                 |              | for reply within<br>for reply within     | in first month<br>in second month | \$<br>\$ |  |
| 1. BASIC FILING FEE   | I                        | 1252 420                  | 2252                 |                 |              | ı for reply withii<br>ı for reply withii |                                   | \$       |  |
| Large Entity Small Entity   | 1                        | 1254 1,480                | 2254                 |                 |              | for reply within                         |                                   | \$       |  |
| Fee Fee Fee Fee Description   |                          | 1255 2,010                | 2255                 |                 |              | for reply within                         |                                   | \$       |  |
| Code (\$) Code (\$)   | Fee Paid                 | 1401 330                  | 2401                 | 165             | Notice of    | Appeal                                   |                                   | \$       |  |
| 1001 770 2001 385 Utility filing Fee  | \$385.00<br>\$           | 1402 330                  | 2402                 | 165             | Filing a bri | rief in support o                        | of an appeal                      | \$       |  |
| 1002 340 2002 170 Design filing fee<br>1003 530 2003 265 Plant filing fee   | \$<br>\$                 | 1403 280                  | 2403                 | 140             | Request fo   | or oral hearing                          |                                   | \$       |  |
| 1003 530 2003 265 Plant filing fee<br>1004 770 2004 385 Reissue filing fee  | \$                       | 1451 1,510                | 1452                 | 1,510           |              | institute a publ                         | lic use                           | !        |  |
| 1004 770 2004 383 Reissue filing fee  |                          | 1 110                     | 2452                 |                 | proceeding   |  |                                   | S        |  |
| 1000 100 2000 00 0.1  | ' " I                    | 1452 110<br>1453 1330     | 2452<br>2453         |                 |              | revive - unavo                           |                                   | \$       |  |
| SUBTOTAL  | (1) \$385.00             | 1453 1,330<br>1501 1,330  | 2453<br>2501         |                 |              | revive - uninte<br>ue fee (or reissu     |                                   | \$<br>\$ |  |
|   | ` '                      | 1502 480                  | 2502                 |                 | Design issu  |  | <i>E</i> ) .                      | \$       |  |
| 2. EXTRA CLAIM FEES FOR UTILITY   |                          | 1503 640                  | 2503                 |                 | Plant issue  |  |                                   | \$       |  |
| Fee fr  |                          | 1460 130                  | 1460                 | 130             | Petitions to | to the Commissi                          |                                   | \$       |  |
| Extra Claims belo   |                          | 1807 50                   | 1806                 |                 |              | g fee under 37 C                         |                                   | \$       |  |
| Total Claims 20 20** = 0 x Independent 4 3** = 1 x  | 9.00 = \$00.00           | 123 50                    | 123                  |                 |              |  | sional applications               | \$       |  |
| Independent 4 3** = 1 x Claims  | 43.00 = \$43.00          | 1806 180                  | 1806                 |                 |              |  | on Disclosure Stmt                | \$       |  |
| Multiple Dependent  | 290.00 = \$ 00.00        | 8021 40                   | 8021                 | 40              |              | g each patent ass<br>times number of     |                                   | œ.       |  |
|   | 270.00 \$ 33.63          | 1809 770                  | 2809                 | 385             |              | times number of<br>abmission after t     |                                   | \$       |  |
| Large Entity Small Entity   | I                        |                           |                      |                 | (37 CFR §    | 1.129(a))                                |                                   | \$       |  |
| Fee Fee Fee Fee Description   | I                        | 1810 770                  | 2810                 |                 |              | dditional invent                         |                                   |          |  |
| Code (\$) Code (\$)<br>1202 18 2202 9 Claims in excess of 2   | 20                       | 770                       | 2201                 |                 |              | (37 CFR § 1.12                           |                                   | S        |  |
| 1202 18 2202 9 Claims in excess of 2 1201 86 2201 43 Independent Claims   |                          | 1801 770                  | 2801                 |                 |              |  | xamination (RCE)                  | \$       |  |
| 1201 86 2201 43 Independent Claims 1203 290 2203 145 Multiple dependent of  |                          | 1802 900                  | 1802                 |                 |              | or expedited exa<br>n application        | mination                          | S        |  |
| 1204 86 2204 43 ** Reissue independ   |                          | Other fee (specify        | A                    |                 | UI a ucorp   | таррисацо                                |                                   | \$<br>\$ |  |
| over original pate  | tent                     | Calci itt (-F             | ,                    |                 |              |  |                                   | J        |  |
| 1205 18 2205 9 ** Reissue claims in and over original   | n excess of 20<br>patent | *Reduced by Basi          | c Filing I           | Fee Paid        |              | SUBTO                                    | OTAL (3) \$                       |          |  |
| SUBTOTAL (2 ** or number previously paid, if greater; For Reissues,   |                          | l                         |                      |                 |              |  |                                   | Para     |  |
| SUBMITTED BY  |                          |                           |                      |                 | Cor          | mplete (if applic                        | rable)                            |          |  |
| Name (Print/Type) Marcella D  |                          | Registration (Attorney/Ag |                      | 36,96           |              | Telephone                                | (713) 238-8000                    | <b>5</b> |  |
| Signature   | mullo                    | alle                      | )                    |                 |              | Date                                     | February 6, 20                    | 004      |  |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.